# **SEPA** ENVIRONMENTAL CHECKLIST

## Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

# Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to <u>all parts of your proposal</u>, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

# Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

# Use of checklist for nonproject proposals: [help]

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the <u>SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D)</u>. Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

# A. Background [help]

1. Name of proposed project, if applicable:

# St Helens Forest Restoration Thin

2. Name of applicant:

Washington Department of Fish and Wildlife (WDFW)

3. Address and phone number of applicant and contact person: [help]

**Contact: Rod Pfeifle** 

Address: DNR SE Region Office, 713 Bowers Road, Ellensburg, WA 98926-9301

Phone: 509-680-3175

4. Date checklist prepared:

February 13, 2016

5. Agency requesting checklist:

Washington Department of Fish and Wildlife (WDFW)

6. Proposed timing or schedule (including phasing, if applicable):

June 1, 2017 through June 1, 2018
There will be down time for weather and/or wildlife habitat considerations

- 7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
- A. Slash Disposal: Debris from timber harvest operations (limbs, tops, etc.) will be piled and trailed at landings in preparation for burning. Slash burning will be carried out after the timber harvest work has been completed. All slash burning will be completed as per Department of Natural Resources and Department of Ecology regulations.
- B. Regeneration Method: There is currently an abundance of pulp and small sawlog size timber on the site including Douglas-fir, western hemlock, western red cedar and red alder. Following harvest operations, there will be no need to plant any additional seedlings.
- C. Pre-Commercial Thinning/Slashing: The commercial thinning units will be reevaluated after harvest operations have been completed to assess the need for precommercial thinning and/or slashing.
- D. Close and/or abandon selected roads, at the discretion of the local Wildlife Area Manager, after project completion.
- 8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
- WDFW Priority Habitat and Species Management Recommendations
- Maps showing: soil type, erosion potential, soil stability, and hydrologic maturity from NRCS
- County Soil Survey data
- 9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

- 10. List any government approvals or permits that will be needed for your proposal, if known.
- A. DNR Forest Practice Application (FPA)
- B. DNR Hydraulic Project Application (HPA)
- C. State and tribal cultural/ archaeological survey and protection plan approval
- D. Road Use Permit With Weyerhaeuser
- 11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The St Helens Thinnning Project is intended to improve ecological integrity ratings, create sustainable habitat for multiple wildlife species and improve forest health. The project is comprised of 6 commercial thinning units on approximately 260 acres and 4 pre-commercial thinning units on approximately 159 acres.

The project will be accessed using existing roads and construction of new temporary roads. Most of these roads will be optional roads for the contractor. If optional roads are deemed necessary by the contractor and WDFW Contract Administrator, the contractor will be required to abandon most roads post-harvest. The exception to this will be roads left open for management purposes (weed spraying, tree planting, pre-commercial thinning, etc.) Please see the attached property map for more detail.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [help]

The St Helens Thinnning project is located approximately 20 miles east of Castle Rock on both sides of the Toutle River on the St Helens Wildlife Area. The project is located in parts of Sections 14, 15, 16, 22, 23, 24, 25, 26 and 27 in Township 10 North, Range 2 East WM and part of Section 31 in Township 10 North, Range 3 East WM in Cowlitz County. See attached maps at the end of this report for physical locations of the units and vicinity.

# B. ENVIRONMENTAL ELEMENTS [help]

E-a-th-

1. Latur	
a. General description of the site:	
(circle one): Flat, rolling, hilly, steep slopes, mountainous, other	
b. What is the steepest slope on the site (approximate percent slope)? [help]	
40%	

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

In general, soils are silt loams with moderate to high potential for erosion, rutting and compaction. These potential issues (if they occur) will be mitigated through measures described below in item h.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Minor road fill and/or cut bank failures have occurred in places on existing roads on the wildlife area. Most of these roads have seen minimal use and very little maintenance since the eruption of Mount Saint Helens in 1980. Repairs will be made to existing roads used as for log hauling. Most of these roads will be abandoned post-harvest, with the exception of those roads that will remain open, at the discretion of the wildlife area manager, for management purposes.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Some fill and excavation work may be necessary to install 2 temporary culverts. Fill will include native material excavated for culvert installation and material excavated during road construction. Up to 40 cubic yards of native material fill will be used for each culvert installation. This fill will come from road construction spoils on site. Temporary fills will be capped with clean rock to prevent sediment delivery to streams. There may also be some minor excavation required on existing roads where cut banks have failed and ditches need to be cleaned out. Excavation will also be required on temporary new construction roads. Pre-haul maintenance on exisiting roads will include grading to make roads suitable for log haul. Spot grading will occur as needed during the actual logging operation to maintain road conditions. Most project roads on WDFW ownership will be abandoned post-harvest unless they are deemed necessary for post-harvest management needs by the wildlife area manager.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Minor erosion could occur from harvesting equipment and skidders operating in the project area. There may also be minor erosion from roads and right-of-ways due to increased log truck traffic. If erosion does occur, mitigation measures including installation of straw bales, straw waddles, water bars, drain dips and grass seeding will be used as necessary. Additionally, logging operations and/or log hauling will be curtailed until mitigation measures are in place and the erosion threat has subsided.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
  - Ground based equipment will not be allowed on continuous slopes in excess of 40%
  - Skid trails on steeper slopes will be water barred appropriately following skidding operations as per written instruction and approval of completed work from the WDFW Contract Administrator
  - Skidding operations will be temporarily suspeneded when rutting depth exceeds
     6"
  - At the discretion of the WDFW Contract Administrator, exposed skid trails on steeper slopes will be grass seeded with certified weed free seed as per Wildlife Area Manager recommendations and approval of completed work from the WDFW Contract Administrator
  - Exposed cut banks resulting from road building and/or maintenance activities will be grass seeded with certified weed free seed as per Wildlife Area Manager recommendations and approval of completed work from the WDFW Contract Administrator
  - Drain dips and/or water bars will be installed on steeper roads post-harvest as per written instruction and approval of completed work from the WDFW Contract Administrator
  - Temporary roads necessary for log hauling operations will be abandoned at the discretion of the Wildlife Area Manager. Road abandonment must be approved in writing by WDFW Contract Administrator and DNR Forest Practices Forester.
  - Haul operations will be suspended immediately, until mitigation is approved in writing by the WDFW Contract Administrator, if any delivery to typed waters is observed

#### 2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

The proposal will result in a temporary increase in vehicle emissions from logging equipment and log trucks. There should be no significant impact to air quality. Slash burning will be conducted in accordance with provisions contained in the DNR slash burning permit as well as any smoke management, Department of Ecology and local fire district regulations.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

#### None

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

#### 3. Water

- a. Surface Water:
  - Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

North Fork Toutle River and un-named tributatires.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

There will be no activity within 200' of the North Fork of the Toutle River. Type F tributaries to the Toutle River will be protected with the appropriate Site Index Riparian Management Zone (RMZ) buffers as per current Forest Practice Rules.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

#### None

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No

- b. Ground Water:
  - Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

#### None

- c. Water runoff (including stormwater):
  - 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Spring runoff from snow melt and rainfall runoff could occur on the forest floor, roads and landings. Water will be dispersed back into undisturbed forest areas for natural filtration through vegetation and soil. Runoff intercepted by roads and ditches will be diverted through existing culverts, water bars, drain dips, ditches and ditch outs to the forest floor. If the event of an extreme weather event, runoff could reach nearby streams.

3) Could waste materials enter ground or surface waters? If so, generally describe.

There is the remote chance that fuel or oil associated with equipment operations could be spilled and potentially enter ground or surface waters. The contractor will be required to have an approved spill kit in each piece of equipment to contain and clean up spills if they should occur. Fuel storage is only allowed in approved areas. The contractor will be required to contact the WDFW Contract Administrator and the appropriate Department of Ecology Office immediately after a spill occurs.

4) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

#### No

- d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:
  - Limit based equipment operations to slopes less than 40%
  - Install water bars and drain dips at appropriate road locations
  - Install water bars on skid trails where appropriate after skidding operations
  - Minimize rutting of skid trails and remove those ruts at the completion of skidding operations
  - Apply certified weed free grass seed on exposed road cut banks and steeper skid trails as necessary

4. Plants <u>[help]</u>
a. Check the types of vegetation found on the site: [help]
x_deciduous tree: alder, maple, aspen, otherx_evergreen tree: fir, cedar, pine, otherx_shrubsx_grasspasturecrop or grainOrchards, vineyards or other permanent cropsx_wet soil plants: cattail, buttercup, bullrush, skunk cabbage, otherwater plants: water lily, eelgrass, milfoil, otherother types of vegetation
b. What kind and amount of vegetation will be removed or altered?
A portion of the over story conifer trees greater than or equal to 6" diameter at breast height (dbh) will be removed in the commercial thinning units. Overall, approximately 40% to 50% of the merchantable volume will be removed. Approximately 4 to 5 thousand board feet (MBF) per acre will be removed from the commercial thinning units. Small patch cuts are proposed in dense alder thickets. Any conifer found in these alder thickets will be retained.
In the pre-commercial thinning units, the goal will be to leave between 80 and 120 trees per acre post treatment. Actual leave tree densitities will depend upon tree size and the presence (or absence) of overstory commercial size trees greater than 10 inches diameter at breast height.
c. List threatened and endangered species known to be on or near the site. [help]
None
d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
regulation on the site, if any.
None

#### 5. Animals

a. <u>List</u> any birds and <u>other</u> animals which have been observed on or near the site or are known to be on or near the site.

## Examples include:

c. List any threatened and endangered species known to be on or near the site.

#### None

d. Is the site part of a migration route? If so, explain.

#### No

e. Proposed measures to preserve or enhance wildlife, if any:

#### None

f. List any invasive animal species known to be on or near the site.

#### None

#### 6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

#### None

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

#### No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: <a href="[help]">[help]</a>

# 7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

There could be fuel spills when refueling equipment or oil spills while performing equipment maintenance. There is always the risk of fire from equipment operation in the woods. However, equipment will be required to have spark arrestors to reduce the fire risk. In addition, the contractor will be required to monitor and adhere to Industrial Fire Precaution Level (IFPL) regulations as required by the Washington State Department of Natural Resources. Burning of slash piles, resulting in temporary smoke emissions, could occur after harvest operations are completed. Additional temporary smoke emissions could be possible If prescribed fire is used as a management tool post treatment.

1) Describe any known or possible contamination at the site from present or past uses.

#### None

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

#### None

 Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

#### None

4) Describe special emergency services that might be required.

In the event of a fuel or oil spill, the contractor will be required to immediately contact the nearest office of the Washington State Department of Ecology and the WDFW Contract Administrator. In the event of a wildfire, the contractor will be required to immediately contact the Washington State Department of Natural Resources and the WDFW Contract Administrator.

5) Proposed measures to reduce or control environmental health hazards, if any:

The contractor will be required to have an emergency plan approved by the WDFW Contract Administrator prior to commencement of timber harvest activities. This will include:

- Contact information for the nearest office of the Washington State Department of Ecology, Washington State Department of Natural Resources and the WDFW Contract Administrator
- Inspection of equipment for spill kits
- Having a fire trailer and necessary fire tools on site during the closed season as required by the Washington State Department of Natural Resources
- Requiring the contractor to keep up to date and in compliance with the latest Industrial Forest Precaution Level (IFPL) regulations during the closed fire season

#### b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Minimal noise from recreational vehicle traffic.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

During harvest activities there will be some noise associated with chainsaws, skidder, loader, and trucks. Typically this would occur during daylight hours only and when weather conditions allow. Heavy equipment noise may exceed 100 decibels.

3) Proposed measures to reduce or control noise impacts, if any:

Requiring equipment operators to maintain mufflers on equipment and wear appropriate ear protection.

#### 8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The site is currently being used for wildlife habitat and recreational activities. Adjacent properties are managed as working forests and rural home sites. This proposal will not affect current land uses on nearby or adjacent properties.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

This site has been used for farming and forest management. There are abandoned pastures on site that have not been used since 1980. There will be no net loss of farming/working forest lands in conjunction with this project.

c. Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

There will be a temporary increase in log truck traffic, dump trucks with low boy trailers, and equipment useage on forest access roads into the project units for the duration of the project.

d. Describe any structures on the site.

#### None

e. Will any structures be demolished? If so, what?

No

f. What is the current zoning classification of the site?

#### **Forest Land**

g. What is the current comprehensive plan designation of the site?

#### **Forest Land**

h. If applicable, what is the current shoreline master program designation of the site?

#### N/A

 Has any part of the site been classified as a critical area by the city or county? If so, specify.

#### No

j. Approximately how many people would reside or work in the completed project?

k. Approximately how many people would the completed project displace?

#### None

I. Proposed measures to avoid or reduce displacement impacts, if any:

#### None

M. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

#### None

n. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

#### None

## 9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

#### None

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

#### None

c. Proposed measures to reduce or control housing impacts, if any:

#### None

#### 10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

#### N/A

b. What views in the immediate vicinity would be altered or obstructed?

#### None

c. Proposed measures to reduce or control aesthetic impacts, if any:

#### 11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No

c. What existing off-site sources of light or glare may affect your proposal?

None

d. Proposed measures to reduce or control light and glare impacts, if any:

None

## 12. Recreation [help]

a. What designated and informal recreational opportunities are in the immediate vicinity?

There are currently no designated recreational opportunities on the Saint Helens Wildlife Area. Informal recreational opportunities include hunting, fishing and hiking.

b. Would the proposed project displace any existing recreational uses? If so, describe.

The project could temporarily displace recreational users for the duration of the project. However, any disruption would be temporary in nature. Access roads will be posted with signs to alert recreational users when there is logging activity in the project area.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Put up signs at the start of active logging roads informing users to be aware of log truck traffic on the road with a cb channel and mile markers posted.

# 13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

An internal cultural review was completed by the WDFW Archaeologist with the determination that there was no potential impacts to cultural and historic resources.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

None. If resources are discovered during the operations phase of the project, the contractor will will be instructed to cease operations in that area until appropriate mitigation measures, if any, can be implemented.

# 14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Primary access to the project area on public roads will be the Debris Dam County Road and State Route 504. From there, several Weyerhaeuser Corporation roads will be used to access the units themselves. Use of Weyerhaeuser Corporation roads will be according to the provisions of a road use permit (RUP) agreement between the State of Washington Department of Fish and Wildlife and Weyerhaeuser Coporation. The RUP is for logging purposes only and does not include any consideration for long term use or use by the general public.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

d.	bid	Il the proposal require any new or improvements to existing roads, streets, pedestrian, cycle or state transportation facilities, not including driveways? If so, generally describe adicate whether public or private).
		No
e.	Wi trai	Il the project or proposal use (or occur in the immediate vicinity of) water, rail, or air asportation? If so, generally describe.
		No
f.	be	w many vehicular trips per day would be generated by the completed project or proposal? nown, indicate when peak volumes would occur and what percentage of the volume would trucks (such as commercial and nonpassenger vehicles). What data or transportation dels were used to make these estimates?
		None
g.	Wi	ill the proposal interfere with, affect or be affected by the movement of agricultural and est products on roads or streets in the area? If so, generally describe.
		None
h.	Pro	oposed measures to reduce or control transportation impacts, if any:
		None
15	. Pı	ublic Services
	a.	Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.
		No
	b.	Proposed measures to reduce or control direct impacts on public services, if any.
		None
16.	Ut	ilities
	elec	cle utilities currently available at the site: tricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, er
b.	and	scribe the utilities that are proposed for the project, the utility providing the service, If the general construction activities on the site or in the immediate vicinity which might

None

be needed.

# C. Signature [help]

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.
Signature: Kod Plifle
Name of signee Rod Pfeifle
Position and Agency/Organization Statewide Forester Washington Department of Fish and
Wildlife
Date Submitted: _2/28/17